

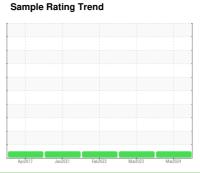
# **OIL ANALYSIS REPORT**

# RED VENTURES [134423] **GENERAC GEMINI 3 - GEN B**

Component

**Diesel Engine** 

**DIESEL ENGINE OIL SAE 15W40 (--- GAL)** 





### Recommendation

Resample at the next service interval to monitor.

Metal levels are typical for a new component breaking in.

### Contamination

There is no indication of any contamination in the

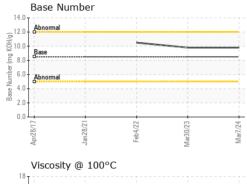
### **Fluid Condition**

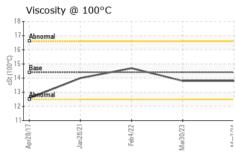
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

		Apr2017	Jan2021	Feb 2022 Mar 2023	Mar2024	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0884260	WC0770494	WC0637085
Sample Date		Client Info		07 Mar 2024	30 Mar 2023	04 Feb 2022
Machine Age	hrs	Client Info		93	91	86
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATIO	N	method	limit/base	current	history1	history2
Fuel		WC Method	>6.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	<1	<1	2
Chromium	ppm	ASTM D5185m	>20	<1	0	0
Nickel	ppm	ASTM D5185m	>2	0	0	<1
Titanium	ppm	ASTM D5185m		<1	1	1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	0	0	<1
Lead	ppm	ASTM D5185m	>40	0	0	<1
Copper	ppm	ASTM D5185m	>330	1	0	2
Tin	ppm	ASTM D5185m	>15	<1	0	0
Antimony	ppm	ASTM D5185m				<1
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	6	63	105
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	50	27	4
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m	450	840	704	676
Calcium	ppm	ASTM D5185m	3000	941	1111	1307
Phosphorus	ppm	ASTM D5185m	1150	929	928	953
Zinc	ppm	ASTM D5185m	1350	1091	1076	1076
Sulfur	ppm	ASTM D5185m	4250	3222	3186	3006
CONTAMINANTS	3	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	4	2	4
Sodium	ppm	ASTM D5185m	>158	<1	0	2
Potassium	ppm	ASTM D5185m	>20	0	4	4
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0	0.1	0
Nitration	Abs/cm	*ASTM D7624	>20	4.5	5.3	6.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.4	18.0	19.7
FLUID DEGRAD	NOITA	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.5	11.9	13.7
Base Number (BN)	mg KOH/g	ASTM D2896		9.8	9.8	10.5
_accitation (DIV)	mg nong	.101111 DE000	3.0	0.0	0.0	10.0



## **OIL ANALYSIS REPORT**





VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
<b>Emulsified Water</b>	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERTIES		method	limit/base	current	history1	history2

FLUID PROPE	RTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	14.4	13.8	13.8	14.7	
GRAPHS							
Iron (ppm)			100	Lead (ppm)			
200 Severe	1	<u> </u>		Covere	ļ		-
Abnormal			60 E 40	Abaranal			
100 - Automai			40				
217	22	53		_		53	24
Apr28/17 Jan28/21	Feb4/22.	Mar30/23	Mar7/24 -	Apr28/17 Jan28/21	Feb4/22	Mar30/23	Mar7/24
Aluminum (ppm	1)			Chromium (p	pm)		
Severe			50 40	Severe			
Abnormal			E 30				
10			<sup>2</sup> 20		!		1
0			0			m	-
Apr28/17 Jan28/21	Feb 4/22	Mar30/23	Mar7/24	Apr28/17 Jan28/21	Feb4/22	Mar30/23	Mar7/24
Copper (ppm)		2		Silicon (ppm)		2	
Severe al		***************************************	80				-
200		!	60 E 40	1:			
100			20	Abnormal			
0							_
Apr28/17 Jan28/21	Feb4/22	Mar30/23	Mar7/24	Apr28/17 Jan28/21	Feb 4/22	Mar30/23	Mar7/24
√ Viscosity @ 100		N	2	₹ 3		Ñ	2
Abnormal			15.0 \$				
1617			Q B10.0	Base			_
214 Zi Abnormal			5.0	Abnormal			-
12			0.0 Passe Mumber (mg KOH/g)				
Apr28/17	Feb4/22 -	Aar30/23 -	Mar7/24	Apr28/17	Feb4/22 -	Aar30/23 +	Mar7/24 +
Jan Jan	42	- in	Š	la la	프	a a	Š





Laboratory

**Sample No.** : WC0884260

Lab Number : 06125558 Unique Number : 10939709 Test Package : MOB 1 (Additional Tests: TBN)

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received

**Tested** Diagnosed

: 21 Mar 2024 : 22 Mar 2024

: 22 Mar 2024 - Wes Davis

**NATIONAL POWER CORP** 4541 PRESLYN DR RALEIGH, NC US 27616

Contact: BRANDON RICE brandon.rice@natpow.com T:

To discuss this sample report, contact Customer Service at 1-800-237-1369. \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

F: (919)790-9714